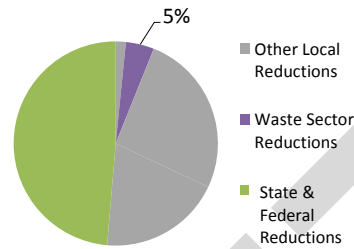


2014 CAP UPDATE - Solid Waste & Wastewater Sector Planning Matrix

Example Strategies	Jurisdiction
Achieve zero waste to landfills through recycling and composting	San Francisco County
Increase diversion rate to 75% by 2020, and Zero Waste by 2040 (draft)	San Diego
Reduce waste, based on the 2007 per capita baseline, by 75% by 2020	Riverside
Reduce solid waste going to the landfill or incinerator by 50% from 2008 levels	Vancouver
Divert 80% of solid waste from landfill	Santa Monica

Greenhouse Gas Emission Reductions



Assuming all sectors reduce equally, the Waste Sector would need to reduce annual emissions by :

21,918 MT CO₂e by 2020

To meet this goal, the community would need to reduce waste consumption by:

**45,000 ton/yr & 4.4 MG/yr or
1 lb/day & 17 gal. per capita reduction or
28% per capita reduction**

For reference:

- Current solid waste rate is 3.5 lbs/day
- About 50% of landfilled waste is organics

Current Actions			Notes
City Actions	1	Require free energy & water evaluations for businesses thru business licensing (includes recycling)	CV CAP - Mitigation #3: ~600 evaluations annually
	2	Provide free energy & water evaluations for homes (includes composting & recycling)	CV CAP - Mitigation #5: ~150 evaluations annually
	3	Clean vehicle replacement for city-contracted fleets	CV CAP - Mitigation #2: 100% of fleet have been converted to AFV.
	4	Recruit & retain "green" businesses - CLEAN Business certification program	CV CAP - Adaptation #11: ~170 Businesses certified
Example Actions		Jurisdiction	Notes
5 Incentivize Conservation			
a	Update solid waste disposal billing rates to incentivize conservation	Berkeley, Chula Vista & Oakland	Oakland - Restructure muni code, waste franchise agreement, and residential recycling service contracts/rates Chula Vista - Variable rates
b	Enforce mandatory recycling ordinance	Vancouver	Fee at disposal site for any waste with recyclables included
c	Provide incentives to encourage the development of a local market for recycled materials	Chula Vista & Sacramento	Chula Vista - Tax credit & low-interest loans through Recycling Market Development Zones (RMDZ) or similar program
d	Provide grants for sharing co-ops and lending libraries	Seattle & Vancouver	Vancouver - Sharing co-ops and lending libraries Seattle - School grants to establish system-wide collection for food and yard waste
e	Work with waste haulers to reduce emissions from vehicle fleet	Chicago, Chula Vista & Seattle	Seattle - Switch to every other week collection Chula Vista - 100% Alternative Fuel Vehicle (AFV) fleet
f	Require city financed development projects to meet a higher green building standard that includes a waste reduction and/or recycling standard	Minneapolis & Seattle	-----
6 Education & Outreach			
a	Composting and recycling education and outreach (classes, guides, etc.)	Berkeley, Chicago, Chula Vista, Encinitas, Los Angeles County, Minneapolis, Seattle & Vancouver	Berkeley - Promote curbside program Chicago - Promote curbside program Chula Vista - Composting classes, discounted bins & food waste pilot Encinitas - Focused on food scraps Minneapolis - Reduce the disposal of products and packaging that are neither recyclable or compostable
b	Provide more public recycling containers on commercial corridors and in parks and public places	Berkeley, Chula Vista & Sacramento	-----
c	Outreach to promote deconstruction and reuse of building materials	Berkeley	-----
d	Promote zero waste events	Encinitas	-----
e	Educate public about opt-out opportunities for materials like phone books and junk mail	Chula Vista, Sacramento, Seattle & Minneapolis	Sacramento - develop a prevention outreach program
f	Promote and encourage paperless billing and payment options	Chula Vista, Sacramento	Chula Vista - Work with waste hauler to encourage paperless billing
g	Identify major organic waste producers and conduct a targeted campaign to increase organics recycling	Chula Vista & Minneapolis	Chula Vista - Part of food waste pilot program
h	Develop educational materials that illustrate the emissions impacts of common products or behaviors	Minneapolis	-----
i	Promote extended producer responsibility policies	Chula Vista, Encinitas, Oakland, Seattle & Vancouver	Chula Vista - Part of City Council's state legislative agenda

j	Clearly label trash cans and other garbage receptacles as "landfill"	Portland	-----
k	Decrease use of disposable products by conducting upstream waste prevention campaigns	San Francisco	Along with material bans
n	Develop a Zero Waste Certification program for businesses	Vancouver	-----
o	Provide discounted compost receptacles	Chula Vista & Los Angeles County	Chula Vista - Free worm bins or discounted (\$35) compost bins (after attending backyard composting class)
7	Codes & Standards		
a	Expand the types of materials that are collected for recycling	Berkeley & Minneapolis	-----
b	Ban single use bags	Berkeley, Hayward, Oakland, San Diego City, San Francisco, & Seattle	-----
c	Ban non-recyclable/compostable, single-use food takeout containers	San Francisco & Seattle	-----
d	Limit the use of single-use plastic beverage bottles in municipal buildings and events	Berkeley	-----
e	Develop partnerships to recycle HFCs (Hydro fluorocarbons) from discarded appliances	Chicago	-----
f	Increased recycling and composting at public events	Chula Vista, Oakland & San Francisco	Oakland & San Francisco - Require waste reduction plan and follow-up report Chula Vista - Focused on increasing recycling (not composting)
g	Institute post-collection sorting for municipal solid waste (MSW)	Portland & San Francisco	Both sort MSW to remove additional recyclables or compostables
h	Provide curbside collection for food waste	Chula Vista, Hayward, City of LA, National City, Portland, San Diego City, San Francisco, Santa Monica, Sacramento & Vancouver	Chula Vista - Pilot program to add food waste to greenery San Diego City - Add kitchen scraps to greenery Sacramento - Pilot program from one neighborhood (uses methane to make bio-fuel) SF - Use both collected (curbside) organics and recovered organics from mixed waste to produce biogas LA - Pilot program started in 2008 but unable to permit full facility Santa Monica - Target single-family and multi-family residents, restaurants, and grocery stores Vancouver - Collecting the full spectrum of food scraps and compostable paper for single family homes and pilot programs in multi family National City - Working to establish a curbside composting pilot project
i	Increase Landfill methane capture rate	San Diego City	Target of 80% capture by 2020 (Otay currently at 97%)
j	Implement a Zero Waste Plan	San Diego City & Santa Monica	Both - Set Zero Waste Goal (95% diversion) and create plan to reach goal by 2040 for SD and 2035 for SM
k	Develop a resource recovery center at landfill	Chula Vista, San Diego City & Seattle	Serve as easy point to recycle what was going to landfill Chula Vista - Discussing as part of next waste hauler contract
l	Develop facilities that will convert MSW to energy without incineration	Los Angeles City & County	City of LA - RENEW LA Plan calls for 7 facilities
m	Encourage and pilot "paperless" operations for select city processes	Seattle	-----
n	Adopt/update a Construction and Demolition Ordinance	Chula Vista, Los Angeles County, National City, Oakland, Port of San Diego, San Diego City & Santa Monica	City of San Diego - Recycle 75% of waste and post a refundable deposit to ensure compliance Santa Monica - Recycle 75% of waste Oakland - Update existing ordinance to capture greater amount of materials Chula Vista - 100% of inert materials and a minimum of 50% of all other materials and post a refundable deposit
o	Ban certain construction and demolition waste from job sites and private transfer stations	Seattle	Phase-in bans of recyclable metal, cardboard, plastic film, carpet, clean gypsum, clean wood, and asphalt shingles
p	Develop a process that takes apart buildings and salvage materials, rather than traditional demolition method	Vancouver	-----
q	Creating grading standards for salvaged structural lumber so that it can be more readily reused.	Seattle	-----
r	Develop training programs for deconstructing buildings	Seattle	-----
s	Require all businesses to recycle	Statewide	Chula Vista Municipal Code 8.25.050
8	Wastewater		
a	Increase capture rate of methane from wastewater treatment	San Diego City	Target of 98% capture by 2020 (all CV waste water is sent to SD)
b	Use sewer ratepayer funds to incentivize indoor water conservation	[New Idea]	Also listed within Water Sector Planning Matrix
c	Create on-bill financing that can be applied to sewer bills and used for indoor water conservation	Hayward & Windsor	Also listed within Water Sector Planning Matrix
d	Point-of-sale residential water conservation ordinance (can include audits and/or upgrades)	San Diego, Sacramento & LA	Also listed within Water Sector Planning Matrix

e	Incorporate CalGreen Tier 1 Water Efficiency retrofits into rental housing with tenant turnover	Sacramento	Also listed within Water Sector Planning Matrix
f	Support water conservation educational programs	Chula Vista, Encinitas, City of LA, County of LA, National City, Riverside, Sacramento & Santa Monica	Also listed within Water Sector Planning Matrix
g	Distribute water-saving devices such as faucet aerators and shower heads	Chula Vista, Riverside, & SDG&E	Also listed within Water Sector Planning Matrix
9	Other Ideas?		
a			
b			
c			